In The Specification:

Please amend paragraphs [0026], [0029], [0031] as follows:

[0026] FIG. 4 is a schematic view simulating the power dissipation of an AMOLED circuit design, according to one embodiment of this invention. In FIG. 4, for easy understanding and descriptions of the invention, the internal power lines are separated into two parts. However, the number of sections is not limited to only two sections. Also and, the simulation assumption is the same for the conventional situation shown in FIG. 1, so as to show the difference of the power consumption between the invention and convention. Four pixels are exemplary considered in the simulation. In addition, the light-emitting device of each pixel requires a driving current ~~Ito~~ I to have a brightness B.

[0029] The power dissipation for the right-part internal power line 410 is as follows. While the positive power source 406 generates an electric current 4I, a diverted amount of electric current 2I flows through the external power line 404 and reaches the right-part internal power line 410. The current 2I then flows through the third section 416 of the internal power line dissipating $P(416) = (2I)^2 R = 4 I^2R$, and an amount of electric current I flows into the pixel 424. The remaining electric current I then flows through the fourth section 418 dissipating $P(418) = (I)^2 R = I^2R$, and supplies an electric current I to the pixel 426. Therefore, the total power dissipation of the right-part internal power line 410 is $P(410) = P(416) + P(418) = 5 I^2R$. The total power dissipation on the internal power line is ~~P9408)~~ P(408) + P(410) = $10 I^2 R$.

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According to the foregoing scheme, power dissipation on the circuit of FIG. 4 is only one third of the power dissipation of the conventional circuit of FIG. 1. Therefore, the derivation scheme of the invention implemented for the power line can effectively reduce the power consumption.

[0031] In ~~conclusions~~ conclusion, the characteristics of the invention are that the external power line is connected to the pixels with a number of internal power lines, and the internal power lines are segmented into many parts. Since the external power line diverts into a number of internal power lines, and the internal power lines are separated into parts, the electric current flows in a substantially smaller amount through the internal power lines. As a result, power dissipation can be improved. In addition, the invention can save the power and can reduce the thermal effect on the panel. The lifetime of the panel is prolonged.